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ABSTRACT

The extent of grade retention in Massachusetts is assessed in this report, which examines current research on grade retention and suggests alternative practices for dealing with low achieving students. Data were derived from the Chapter 188 Individual School Report for 1987-88, an annual survey of Massachusetts conducted by the Department of Education. A total of 1,744 out of 1,768 schools returned completed surveys, a 99 percent response rate. Following an introduction that discusses the history of grade retention and its relevance to the present, chapter 1 presents a review of research, concluding that grade retention may hinder rather than enhance student achievement. Chapter 2 offers recommendations and administrative strategies for assessment and planning, curriculum and instruction, student grouping and promotion, and staff development. Seven projects to reduce the numbers of grade retentions are briefly described in the third chapter. Statewide data on students recommended for grade retention are presented in chapter 4. Three figures and five tables are included. (14 references) (LMI)

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STRUCTURING SCHOOLS FOR STUDENT SUCCESS:

A FOCUS ON GRADE RETENTION

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April, 1990

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From the Commissioner

A focus on grade retention:

The problem of how to ensure that students master appropriate skills and knowledge while passing from one grade to the next is a concern of all educators, parents, community members, and even students themselves. Traditionally, the practice of grade retention has been viewed as a solution by providing additional instruction to low achieving students while lending meaning to promotion from grade to grade. Yet, recent research questions whether grade retention does, in fact, accomplish the intended goal of raising the achievement levels of low-performing students.

In recent years, numerous state and national studies have documented that large numbers of our young people are unprepared academically to lead productive lives in our democratic and increasingly technologically-oriented society. Many of these same studies suggest that grade retention may hinder, rather than enhance, the achievement rates of low-achieving students. Ironically, however, this practice remains a common one among most of the Commonwealth's districts.

In light of the research and the need to raise academic achievement for all students, we must rethink the impact of grade retention. It is time to take a closer look at how grade retention affects the learning and social-emotional development of students, and to adopt educational practices which are genuinely successful in raising both the achievement levels and self-esteem of all students, and in particular, those who are currently achieving at low levels.

This advisory, *Structuring Schools for Student Success: A Focus on Grade Retention*, is a first step in beginning a dialogue by examining the current research on grade retention and suggesting alternatives to its practice. The advisory also provides data on the extent to which Massachusetts school systems are currently recommending students for grade retention.

I hope that this paper will be a useful tool in generating discussion on this tremendously important topic.

Harold Raynolds, Jr.
Commissioner

STRUCTURING SCHOOLS FOR STUDENT SUCCESS:

A FOCUS ON GRADE RETENTION

April, 1990

Developed by:

Division of School Programs
Bureau of Student Development and Health

Office of Planning, Research and Evaluation

Massachusetts Board of Education

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Introduction

The History of Grade Retention

Until the late 1800's, schools were largely ungraded and heterogeneously grouped. Movement toward graduation was based upon continuous progress and mastery of core concepts and themes. Mastery was generally determined through exhibitions, interviews, and portfolios, rather than through single standardized tests. In response to large influxes of immigrants and a shift from an agrarian-based to a manufacturing economy, schools were required to educate more of the populace. To cope with such large numbers of students, sorting students into grade levels by chronological age evolved as an efficient form of school organization. This created an evolutionary process by which districts grew to have a centralized administration, a standardized curriculum, diminished teacher autonomy, and grade isolation.

Grade retention is "the practice of requiring a child to repeat a particular grade or requiring a child of appropriate chronological age to delay entry to kindergarten or first grade."[1] The practice of grade retention evolved from the movement to organize schools by grade level and was viewed as reinforcing the national value of meritocracy, that is, that students would rise from grade to grade based upon meeting academic standards. Proponents felt that grade retention would give additional meaning to the value of a high school diploma. On the other hand, opponents questioned whether such a practice had the unintended effect of retarding the progress of low-achieving students.

Why Discuss Grade Retention Today?

Today, grade retention is a widely used practice in the majority of schools across this nation. Nationally, 2-8% of the K-12 public school population is retained in grade each year. Comparatively, other industrialized countries have annual grade retention rates of less than one percent.[2]

Retention rates in the Commonwealth reflect these national figures. A total of 3.5% of the Commonwealth's public school population were recommended for grade retention for the 1989-1990 school year.[3] This figure, however, masks an even larger problem. At a 5.6% rate, urban districts accounted for 66% of the total number of students recommended for retention while comprising only 41% of the total student population. In some districts, up to 15-20% of kindergarten and first graders were recommended for retention, and up to 25-35% of ninth graders.

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One study estimated that by ninth grade, approximately one-half of all students in the nation had been retained at least one grade or had dropped out of school.

Cumulatively, the percentage of each entering kindergarten class that has been retained by the time of high school graduation is high. Nationally, in 1986, it was estimated that 31% of males and 22% of females in the public schools were at least one year behind their age-appropriate grade.[4] One study estimated that by ninth grade, approximately one-half of all students in the nation had been retained at least one grade or had dropped out of school.[5]

High retention rates are a signal that large numbers of students are not learning and achieving at acceptable levels within many of our schools. While the vast majority of school practitioners believe that grade retention is an effective practice, rarely do they examine whether this practice does, in fact, promote accelerated academic achievement for low-achieving students.

Grade retention practices raise many questions: Does grade retention result in increased academic achievement at a rate greater than comparable students who are promoted? Does this practice discriminate against certain groupings of students? On what basis do we make decisions about students who are retained? Is grade retention the most cost-effective method of addressing the problem of low-achieving students, or are there less costly and more effective interventions that can be utilized?

This paper attempts to answer these questions by presenting a summary of recent research on grade retention and by offering recommendations to school practitioners in their consideration of alternatives to present grade retention practices. At stake is the ability of our schools to provide all students with an effective education which instills in them a sense of self-pride and a life-long love of learning.

Chapter 1
A Review of the Research
What Does it Show?

Grade retention is a response to a legitimate educational concern that too many students pass through school without mastering appropriate skills and knowledge at each grade level. Below are common assumptions about the benefits of grade retention, followed by a review of the research. While some may argue that the methodology of many of these studies is less than perfect, the weight of the conclusions reached across studies reinforces their credibility.

ASSUMPTION ONE

Grade retention improves academic achievement by focusing upon the mastery of sequential basic skills, and by giving students an extra year to master academic course work.

What the Research Shows

A. No evidence suggests that grade retention for low-achieving students promotes academic achievement more than promotion.

Although many retained children do make some academic progress during their retained year, research suggests that these students would probably have made similar or higher academic gains if they had been promoted.[6] Over one hundred studies and six major literature reviews have been conducted on the effects of grade retention, and not one has found that grade retention is more beneficial than promotion for low-achieving students.

Over one hundred studies and six major literature reviews have been conducted on the effects of grade retention, and not one has found that grade retention is more beneficial than promotion for low-achieving students.

The majority of studies have found that promoted students achieve at substantially higher rates than do comparable students retained in grade.

- Estimates for negative effects during the first year of retention range from a few months to a half-year in grade equivalent achievement.[7]

- In a South Carolina study of 6,000 retained students, 40% showed less learning and scored lower on achievement tests after being retained; only 20-30% learned more.[8]

- In a Texas study, low-achieving students who were promoted increased their reading achievement by 1.1 grades as compared with 0.8 grade levels for their retained counterparts; similarly, promoted students increased their math achievement by 1.1 grades as compared with a 0.6 grade level increase for retained students.[9]

While many believe that grade retention in kindergarten and first grade does produce academic gains, evidence reveals that first graders retained in kindergarten do not outperform comparison students who are at age-appropriate grade level.[10] The achievement levels of students retained in later grades drop even more dramatically. In one study, while 80% of retained first graders were found to meet satisfactory achievement standards in their second year of first grade, less than 50% of students retained in later elementary years did so.[11]

B. Schools are not able to accurately predict which students will most benefit from grade retention.

Sixty-eight percent of surveyed teachers give primary weight to age when considering retention in the elementary grades. Significant weight is also given to special education status, visual-motor skills, physical size, and scores on standardized achievement tests. Yet, none of these factors have been found to be accurate predictors for whether a student will benefit from grade retention.[12]

In individual cases, students may benefit from grade retention. Retained children who have made substantial academic gains in the first grade were of average or above-average intelligence, made some academic progress during the year, possessed strong self-esteem and good social skills, had a positive relationship with their teacher, and showed difficulty in school primarily because of a lack of exposure to the material (due to high absenteeism or school transfer). As well, parents approved of the retention and students were provided with a substantially different curriculum and methods of instruction during the retained year.[13] However, even these students have fared no better in achievement scores than their peers who are promoted.[14]

...schools are retaining students without any sound or reliable evidence that the retention will benefit the student.

While some districts have designed screening instruments to determine which students will benefit from grade retention, educators have not been able to predict with any degree of accuracy or consistency which students actually will benefit from this practice. Thus, schools are retaining students without any sound or reliable evidence that the retention will benefit the student.[15]

C. In most cases, the type of instruction delivered to retained students may hinder, rather than enhance, their achieve ment rate.

Frequently, students retained in grade received the same teacher, the same curriculum, and/or the same instruction with which they failed the prior year. In some secondary schools, retained students must repeat all of their classes, even those they had passed. Rarely do retained students receive a new program of instruction and curriculum tailored to the student's learning style and strengths and geared to accelerating achievement.[16] This lack of instructional response often leads to student boredom and ultimately retards academic progress for many retained students.

In addition, instruction to grade-retained students generally focuses upon learning discrete basic skills sequentially. The emphasis of instruction for these students, is on drills, rote learning, and worksheets - all passive forms of instruction. This instructional approach is in conflict with how students learn. Increasingly, educators suggest that students learn best through instruction focused upon the aquisition of cognitive skills. Cognitive-based instruction relates "new knowledge in a meaningful way to the knowledge students have already developed," and teaches concepts thematically as an approach to learning discrete skills.[17] Mastery of basic skills, then, is a result of, not a precursor to, "interaction with written texts in meaningful ways."[18]

D. Grade retention represents a grouping arrangement that is not helpful to many students.

Current grade structures are oftentimes based upon an assumption that all students learn the same material in the same way at the same rate. Yet, child development theorists tell us that children do indeed master skills and concepts at different rates and with different modes of learning (e.g., visual, experiential).[19] Consequently, such an assumption guarantees that some children will succeed and some will fail.

Child development theorists also suggest that the key to determining success is if a child is actively engaged in the pursuit of learning and is making academic progress in at least some areas. While mastery of core skills and concepts should be an important end goal of schooling, how and at what rate students achieve this mastery needs to be examined to ensure that all students are being provided with appropriate learning experiences.

While mastery of core skills and concepts should be an important end goal of schooling, how and at what rate students achieve this mastery needs to be examined to ensure that all students are being provided with appropriate learning experiences.

Essentially, grade retention is a form of ability grouping, in that low-achieving students are held back a grade and placed with younger students who are thought to be closer to their achievement levels. The research concludes, however, that ability grouping retards the academic progress and negatively influences the affective development of low-ability-grouped students, and can result in these students receiving an inferior education.[20]

E. Retention coupled with remediation generally is not successful in bringing students back up to grade-appropriate academic achievement.

Too often, promises of remediation go unfulfilled. Rarely do retained students receive consistent and substantial instructional support during their retained year. For example, of thirty-one states that recently mandated a state-wide retention policy, only twelve provided funds to schools for remediation.[21]

Even in cases where substantial remedial help is provided to retained students, students have not achieved at rates higher than their promoted peers. In 1981, the New York City Public Schools initiated a Promotional Gates Program in which fourth and seventh graders were retained if they failed to achieve a minimum score on the California Achievement Test. In the first year, 24,000 students were retained in these grades, comprising 17% of the fourth grade and 26% of the seventh grade. Eleven hundred additional teachers were hired to provide these students with remedial help and to bring class sizes for these students down to a maximum of twenty. Despite these impressive resources, retained students achieved no better than their promoted peers.[22] On the other hand, the largest academic gains by low-achieving students have occurred when students have been promoted and provided with instructional support.[23]

Long-term effects of grade retention have been found to be more negative than short-term effects, with achievement gaps between retained students and their promoted counterparts increasing, rather than diminishing, over time.

F. The harmful effects of grade retention upon achievement levels increase over time. This results in a knowledge gap, which widens with each successive year, between students who have been retained in grade and their promoted peers.

Long-term effects of grade retention have been found to be more negative than short-term effects, with achievement gaps between retained students and their promoted counterparts increasing, rather than diminishing, over time. Rarely are retained students promoted back to their age-appropriate grade level. Thus, a cycle of failure is created, and most retained students spend the rest of their academic careers unsuccessfully trying to catch up to their grade-appropriate peers.[24]

ASSUMPTION TWO

> The self-esteem, personal adjustment, academic confidence, and motivation of retained students increases as they are placed in academic settings in which they become one of the high-performing students.

What the Research Shows

No evidence exists that the social and psychological adjustment of retained students is better than that of promoted students, while substantial evidence exists that the self-esteem of retained students suffers.

Some studies have found that retained children are no better off than promoted peers on measures of personal and psychological adjustment, self-concept, and attitudes towards school.[25] Other studies have found the psychological effects of retention to be negative.[26]

Retained students have been found to have slightly more negative feelings about school. As a result of their retention, students report the following: being teased; feelings of anger, sadness, shame and inferiority; and fear of the judgmental reactions of their parents and neighbors. The retention is viewed by most students as a punishment, regardless of how it is presented. In fact, students have ranked grade retention as the third most feared life experience, behind blindness and the death of a parent.[27]

*...students have ranked **grade retention as the third most feared life experience, behind blindness and the death of a parent.***

Research has also found that older students are perceived as less popular than their promoted peers. In one study, 86-90% of older students were rated by classmates below the sociometric median, that is, being less popular than their younger classmates.[28]

When low-achieving students are retained and do struggle, teachers may use this to justify the retention decision, believing that the students would have been worse off if they had been promoted. Actually, in many cases a predominant reason why retained students struggle during subsequent school years is because of losses in self-esteem due to the retention. Retained students tend to internalize their failure, and low achievement then becomes a self-fulfilling prophecy.[29]

Rather than increasing students' motivation, grade retention many times has the opposite effect. For example, grade retention may increase truancy, a key indicator of students' motivation towards school. A Boston City Hospital study found that, while 20% of

...while 20% of middle school students with excessive attendance problems were placed at their appropriate grade level, 30% were one year behind, and 47% were two years behind.

middle school students with excessive attendance problems were placed at their appropriate grade level, 30% of the students were one year behind, and 47% were two years behind.[30] Truancy is often associated with a low self-esteem and feelings of academic failure.

ASSUMPTION THREE

> Enrolling children in kindergarten or first grade a year later than the eligible age enhances a child's academic achievement and ability to succeed, and gives children a competitive advantage over other classmates.

What the Research Shows

There are no long-term academic benefits to enrolling children in kindergarten a year later than their eligible age.

While students enrolled in kindergarten or first grade a year later than their date of eligibility have been found to achieve at higher rates than their younger peers, these achievement differences are quite small - between 7-9% in reading scores on standardized achievement tests - and do not hold up over time. Any differences in achievement scores based upon age difference disappear by the end of the third grade.[31] There is, however, little research that speaks to the advantages or disadvantages of enrolling a student a year later than their eligibility date because of social and emotional development and growth concerns.

In addition to negligible achievement gains, some educators charge that this practice creates inequities for low-income families. Most poor families cannot afford to enroll their children a year later than their age eligibility due to day care and other costs. Consequently, in classrooms with an economically diverse student body, the younger students tend to be low-income and the older students tend to be more affluent. Such a trend creates classroom dynamics where low-income children are the ones most likely to be retained.[32]

ASSUMPTION FOUR

> Transition classes provide low-achieving students with a more appropriate learning environment in which to succeed and catch up academically with their grade-appropriate peers, while avoiding the stigma of being retained in class.

What the Research Shows

In reality, most transition classes are no different than grade retention.

Transition classes are classes for low-achieving students that are viewed as a step between two grades - usually between kindergarten and first grade, and more recently, between eighth and ninth grade. Transition classes are usually characterized by a smaller class size and a basic skills focus.[33]

In most cases, transition room students achieve no better than their retained counterparts, and rarely rejoin their grade-appropriate peers.[34] While short-term gains may be greater in some cases, the achievement advantages disappear over time. Only in cases where first grade transition room students were provided with a first grade curriculum that was designed to lead to promotion, and these students were in fact promoted to the second grade the following year, did students perform well.[35] Interestingly, promoted students who received more individualized reading instruction have achieved at higher rates than comparable students who were placed in transition rooms.[36]

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While most transition room students do not benefit academically, they do suffer psychologically. Transition room students have been found to have lower self-esteem and lower self-confidence than comparable low-achieving students who were promoted.[37]

ASSUMPTION FIVE

> Schools that retain high numbers of students are effective schools because they have high standards for academic achievement, thus ensuring the value of the district's high school diploma.

What the Research Shows

A. No evidence suggests that students in high-retaining schools fare better academically than students in lower-retaining schools.

The average standardized achievement test scores in schools with little or no retention are equal to those in high-retaining schools.[38] On the other hand, high-retaining schools, as compared to low-retaining schools, tend to group students homogeneously and have high numbers of students placed in pull-out special education classes. Both of these practices have been found to retard the academic progress of low-achieving students.[39]

B. Students who are retained in grade have an increased chance of dropping out of school; thus, high-retaining schools probably have higher dropout rates than low-re taining schools.

Students retained in grade have a greater chance (20-40%) of dropping out of school than their grade-appropriate peers who have similar reading achievement scores.

Students retained in grade have a greater chance (20-40%) of dropping out of school than their grade-appropriate peers who have similar reading achievement scores, when controlled for socioeconomic status and gender. This has been found to be true even when the retention occurs in elementary grades.[40] Being retained in grade a second time increases a student's chances of dropping out of school by 90%.[41]

A Chicago study found that over-age high school students, even those reading at higher levels than their grade appropriate peers, are more likely to drop out of school. Students two years over-age had a 69% dropout rate and students one year overage had a 60% dropout rate, while students at age-appropriate grade levels had a 37% dropout rate.[42] Similarly, a Boston Public Schools' study found that students retained in the ninth grade were more than twice as likely to drop out of school than their promoted peers.[43] In the Cleveland Public Schools, 89% of students who were retained in grade nine dropped out of school, as compared to a 27% dropout rate for promoted students.[44] This research is particularly troubling when coupled with the knowledge that approximately one-quarter to one-half of all students entering high school in many urban cities are overage for their grade level.

C. Promotional "gates" tests (or basing promotion on passing a standardized test) may merely result in the in appropriate retention of students, rather than raising overall academic achievement.

The use of standardized tests as a gate for promotion raises several concerns. Standardized tests have been found to be a poor measure for determining achievement when used as a sole criterion. Test scores can go up or down from day to day because of a host of different factors (for example, how a student feels, when and where the test is given, what instructions are given by the teacher and in what manner they are given). Standardized tests have been criticized for measuring only a narrow and discrete set of academic skills, rather than focusing upon higher order thinking and problem-solving skills.[45]

Many educators argue that using these tests as promotion gates may inhibit, rather than enhance, creative instruction, and en-

courage teachers to teach to test content. Ultimately, as with New York City's Promotional Gates Program, gates tests have not been successful in raising academic achievement, and instead have resulted in greater numbers of students being retained in grade and eventually becoming discouraged learners.[46]

D. Grade retention may in fact be a practice that discriminates according to socioeconomic background, race, and language.

Statistics on students who are retained in grade raise questions about whether the practice is actually a discriminatory one. Grade-retained students are consistently and disproportionately low-income, Black or Hispanic.[47] The use of standardized achievement tests as a means of determining academic placement contributes towards these disproportionate retention rates, as many of these tests have been found to be biased towards low-income, Black and Hispanic students.[48]

Grade-retained students are consistently and disproportionately from low-income households.

In Massachusetts, Black and Hispanic students are three and one-half times more likely to be recommended for retention than White students.[49] Such trends question whether appropriate educational experiences are being offered to these groups of students.

E. Grade retention is a costly and ineffective practice of addressing the problem of low-achieving students.

For each retained student who remains in school beyond his/her projected graduation date, a school district must pay for each additional year of schooling. One study estimated that the national cost of all public school grade retentions for the school year 1985-1986 was $9.7 billion, based upon an average retention rate of 6.0%, an average per pupil cost of $4,051, and a public school population of 40 million students.[50] While this figure may be somewhat high as grade-retained dropouts were not factored in, it has been estimated that these retention costs increase the overall cost of our public school education by 8%.[51]

In Massachusetts, with 28,233 students recommended for grade retention for the 1989-1990 school year and an average per pupil cost of $4,259, the total state-wide cost of one year of aggregate retentions could be as high as $120 million. Some educators would argue that this figure is too high as some students recommended for retention actually were promoted, others dropped out of school, and that many of the actual retained students could be

integrated into classrooms without any additional resources or teachers hired. Other educators would argue that the figure may be too low, as the per pupil cost of retained students is probably higher than the average because these students are disproportionately linguistic minority or referred to and placed in special education, both of which have higher per pupil costs.

Even with a conservative estimate of half of this cost, this is $60 million that public schools in the Commonwealth could be investing in improving the quality of instruction and support for all students. If a full-fledged cost analysis were conducted, that took into account increased dropout rates and subsequent costs to communities, this figure would be significantly higher.

Such high costs would be laudable if the practice was found to be effective in substantially raising academic achievement. However, this is not the case. Our public schools are significantly increasing school budgets by retaining students without any indication that the money is well spent.

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Less costly practices have been found to be more effective than grade retention. For example, promotion with instructional support has been found to substantially raise academic achievement. At an average of $500 per student, school districts could provide a more beneficial intervention at about one-ninth the cost of grade retention.[52]

Summary

In reviewing the research, overwhelming evidence is presented that widespread use of grade retention is not an effective practice in raising student achievement. On the contrary, grade retention may retard academic progress, undermine student self-esteem, and ultimately contribute to a student's decision to drop out of school. "Those who continue to retain pupils at grade level do so despite cumulative research evidence showing that the potential for negative effects consistently outweighs positive outcomes."[53] As with many other school practices which sort students, grade retention impacts disproportionately upon low-income and minority students, and, in most cases, reduces their future opportunities to lead productive lives. Consequently, schools should consider the weight of the evidence against grade retention prior to retaining any child.

Implicit in the practice of grade retention is the notion that the student is to blame for failing to achieve. Yet, "promoting on merit holds students solely responsible for their success or failure and ignores other significant [school] factors in student

achievement...."[54] Students retained in grade may actually be a sign that student needs are not being met by the current school organization, policies, curriculum, and methods of instruction. Instead, schools should seek to determine school causal factors which contribute to low achievement, and search for new strategies that create teaching and learning environments in which all students are engaged in active learning and are making continuous progress towards high school graduation.

"Complex problems merit creative and innovative solutions; [grade] retention has all too often been a simple response to such a complex problem." [55]

Chapter 2
Recommendations
What School Practitioners Can Do

Based upon the research summarized in this paper, schools should consider eliminating the practice of widespread grade retention, and implement alternative strategies to raise the academic achievement of low-achieving students. Such a policy change requires innovative approaches to successfully engaging all students, especially those achieving at low levels. With this in mind, the following recommendations are offered to assist in implementing alternative educational practices that benefit all students.[56] Rather than adopting merely one of these recommendations, districts are encouraged to adopt a comprehensive approach that combines a variety of strategies that best address student needs.

Reaffirming the School and District Mission

Reaffirm, in the form of a mission statement, a fundamental school-wide belief that all students can learn, achieve, and be successful.

Reaffirm, in the form of a mission statement, a fundamental school-wide belief that all students can learn, achieve, and be successful. Set as a common goal the provision of a challenging and enriching education to every student. Acquaint all members of the school community with the works of educators such as Ron Edmonds and Benjamin Bloom, both of whom have demonstrated that all children, with few exceptions, can achieve at high levels.[57]

Recommendations For Assement and Planning

1) Convene a task force of interested members of the school and community to assess present practices of grade retention and transition classes and to explore alternatives. Include student, teacher, parent, community, administrator, and school committee representation on the task force. Garner approval and support from the superintendent and school committee for this endeavor, and ensure task force longevity by granting members stipends and release time. Collect data on the school or district's grade retentions and analyze it, if possible, by race, socioeconomic background, language, gender, and special education status to determine trends. Compare individual school data to district, Kind Of Community, and state-wide averages for grade retention.[58] Use this data to discuss the following questions:

• Are the promotion standards based upon standardized test scores, teacher recommendations, or multiple criteria? Are the criteria valid? Is there a clear policy on grade retention that defines the guidelines under which a student should be considered for retention?

• Are there specific subject areas or grade levels in which large numbers of students are failing, and thus contributing disproportionately to retention rates?

• What is the composition of grade-retained students? Is one category of students being retained more than others?

• Do achievement levels of retained students rise at a commensurate level to comparable promoted students? Do retained students ever catch up academically to their grade-appropriate peers? If so, are they double-promoted to rejoin their peers?

• When students are retained, do they receive a different curriculum and methods of instruction, and are they assigned a different teacher in their retained year?

• How much instructional support is provided to low-achieving students? Is this support adequate?

• What successful practices exist within the school to raise the achievement levels of low-achieving students?

• Is sufficient staff development provided to expose staff to diverse instructional approaches?

What successful practices exist within the school to raise the achievement levels of low-achieving students?

2) Distribute the results of your assessment. Encourage public and staff discussion. In particular, it is important for parents and staff to be informed of the impact of grade retention.

3) Visit other schools and districts that have successfully reduced the numbers of students being retained in grade while increasing academic achievement.

4) If changes in current policies and practices are found to be needed, develop a PreK-12 plan of changing the district's grade retention practices, and present recommendations and a timetable for reducing the number of students being retained. Ensure that this process is a participatory one.

5) Implement the plan and periodically review its effectiveness.

Teach to students' strengths to increase chances of success, while integrating instruction designed to bolster areas of weakness.

Recommendations For Curriculum and Instruction

1) Assess students' academic progress frequently, using multiple measures including student self-assessment and group assessments. In particular, assess students' learning styles and base instruction upon these findings. Teach to students' strengths to increase chances of success, while integrating instruction designed to bolster areas of weakness.

2) Increase the use of nonevaluative feedback to students which gives them a clear sense of their progress in school. Decrease the use of competitive grading and standardized tests to evaluate students, and decrease reliance upon multiple choice, fill-in-the-blank, and true-false tests. Increase the use of exhibitions, performance assessment, portfolios, and other displays of student learning. Consider eliminating the use of course grades and replacing them with narrative assessments of progress, or base grades on relative and continuous progress.

3) Require developmentally appropriate instruction in reading and writing to be a priority for all grades and all disciplines, with the goal of making every student a writer and a reader. Set semester goals for numbers of writing samples to be written and books to be read by each student within each subject area.

4) Explore instructional strategies that accelerate the learning pace of low-achieving students, rather than slowing down the pace of instruction. Employ less whole-group instruction and individual seat work, while increasing the use of active learning pedagogy and student-to-student instructional strategies that require multiple abilities of students. Build in incentives for student group interaction, while establishing cooperative group work as an important value. In particular, increase the use of cooperative learning; project-based learning; peer tutoring and cross-age learning opportunities; applied academics; competency-based instruction; and multiple-ability instructional strategies.[59]

5) Transition to an interdisciplinary approach to the curriculum that is concept-based and thematic, rather than sequential, and reflects students' cultural and socioeconomic backgrounds.

6) Structure the school around cross-discipline teacher teams that work with designated clusters of students over a period of more than one year. Provide these teams with common planning time to develop an interdisciplinary curriculum approach. Give these teams control over scheduling and encourage them to design learning blocks of time that allow for a real-world,

problem solving approach to instruction.

7) Set as a curriculum priority for all students the acquisition of higher order thinking skills - reasoning, problem-solving, analyzing, synthesizing, logic, defending points of view, experimentation, model-building, and evaluation.

Set as a curriculum priority for all students the acquisition of higher order thinking skills.

8) For secondary schools, award credits by semester, even for year-long courses, so that students who fail the first half of the school year still have the opportunity to pass second-semester courses.

9) Assign homework that is meaningful to students. Vary homework assignments, avoiding reliance solely upon writing answers to questions based upon textbook chapters. Instead, emphasize solving problems through applying concepts learned in class.

Recommendations For Grouping of Students

1) Create multigrade classrooms to increase opportunities for peer tutoring, peer modeling, and cross-age groupings of students, and to allow students to progress at their own pace.

2) Eliminate current grade structures, and base promotion or graduation from a school upon continuous progress towards mastery of a defined set of concepts, skills, and outcomes. Establish flexible standards of competence in the primary grades, recognizing that children learn at varying rates. Establish flexible means to demonstrate standards of competence in the secondary grades.

3) Group students heterogeneously, and employ small group learning situations frequently. Within-class groups need not be permanent, but should be reassessed and reconfigured periodically to provide students with opportunities to work with a diverse range of students. Groups can be formed according to interests or learning style rather than perceived ability.

To accomplish this, plan a phase-out approach of current grouping levels that begins in the early elementary grades and moves upwards, and eliminate the lowest ability levels first. Upgrade the curriculum and instruction provided in remaining lower level courses and tracks, with the end goal of providing quality and challenging instruction to all students.

4) Eliminate those transitional programs for low-achieving students which are in effect grade retention programs. Instead,

focus upon creating developmentally appropriate curriculum and instruction in each grade.

Decrease the use of pull-out classes to provide low-achieving students with supplementary, remedial, and special education resource room instruction.

5) Decrease the use of pull-out classes to provide low-achieving students with supplementary, remedial, and special education resource room instruction. Instead, integrate instructional support to these students within the regular education classroom through team teaching, in-class supplementary instruction, and consultation. Team regular education teachers with special education and remedial teachers to design instruction that will boost the academic achievement of low-achieving students, while lowering the teacher-student ratio in regular education classrooms.

6) Expand existing public school early childhood programs; and increase linkages with private early childhood programs. (In a study of low-income Black children, 61% of those attending preschool scored at or above national averages as compared to 38% of those who did not. Similarly, 67% of those attending preschool graduated from high school, while only 49% of the control group did so).[60]

Recommendations For Promotion Policies

1) Promote all or most low-achieving students, while developing for each one an individual plan of services that provides them with sufficient instructional support, counseling and guidance, and home-school contact. Monitor each student closely over the next year to ensure that academic progress is being made.

2) Promote low-achieving students conditionally, and have the student, parent/guardian, counselor and administrator sign a two-way agreement. This agreement should stipulate conditions for promotion the following year (for example, attendance goals, passing grades in all courses, and/or specified hours of community service). The contract should also indicate to the student and parent/guardian what services and support the student will receive to help him/her succeed.

3) For students achieving at very low levels, retain them in grade as a last resort only if they meet all of the following criteria:

- the student is in the early elementary grades;
- the student has good social skills and a strong self-concept;
- the student had a positive relationship with the teacher;
- the student's parent(s)/guardian(s) fully understand the implications of the retention and approve of it; and

• the student receives a substantially different curriculum and methods of instruction and is assigned a different teacher the second year.

Students who are retained in grade should receive increasingly challenging instruction throughout their retained year, with a goal of bringing them back up to grade-appropriate levels of work. Any retention should also have a provision by which students who do catch up academically to their grade-appropriate peers can be promoted during the school year.

Students who are retained in grade should receive increasingly challenging instruction throughout their retained year, with a goal of bringing them back up to grade-appropriate levels of work.

4) Create a double-promotion program for overage students, whereby students sign a contract that, if they meet certain stated criteria, they will be promoted one grade at the semester mark and another grade at year's completion. Criteria for the contract could include attendance goals, passing grades in all courses, the receiving of instructional support, and specified hours of community service. Assign advisors to each of these students and closely monitor their academic progress. Allow students to remain enrolled in this program until they have reached their age-appropriate grade level.

Recommendations For Staff Development

1) Conduct a series of staff development opportunities in the following areas:

• Teacher expectations. Plan strategies on how to raise expectations for all students, while providing teachers with necessary support; and provide follow-up teacher-peer observations in classrooms to assist teachers in implementing new strategies;

• The effects of grade retention on low-achieving students, especially around achievement, self-esteem, and dropouts. Explore alternatives to grade retention. Include presentations from schools that have successfully raised achievement levels while lowering grade retention rates;

• Learning styles. Plan how to match instruction to meet the diversity of learning styles and skill levels within a classroom;

• The social, emotional, and cognitive development of students. Include planning sessions on how better to meet students' developmental needs within the curriculum and the school day; and

• The benefits of heterogeneous versus homogeneous grouping of students. Include presentations from schools that have changed from homogeneous to heterogeneous student grouping.

2) Form Teacher Support Teams - composed of regular education, special education, and remedial teachers; the school nurse; guidance and adjustment counselors; the school psychologist; and an administrator - to provide support to teachers around dealing with individual students, and to discuss organizational and structural changes that could lead to more effective teaching.

Recommendations For Student and Family Support

Conduct seminars for parents/guardians on how to support a child's education at home, including setting aside quiet space and specified times for homework, regular parent inquiry and discussion about school, opportunities to visit cultural centers, and modeling of reading and writing.

1) Conduct seminars for parents/guardians on how to support a child's education at home, including setting aside quiet space and specified times for homework, regular parent inquiry and discussion about school, opportunities to visit cultural centers, and modeling of reading and writing.

2) Use the Teacher Support Team (as described above) to identify low-achieving students who are in need of additional support. Appoint the adjustment counselor to serve as team leader and case manager. For each identified student, develop an individual plan of services to provide to him/her. Recruit community-based human service agencies to sit on the team and provide school-site counseling and academic services to students and families who need it. Monitor the progress of each student regularly.

3) Develop a mentor program in alliance with local higher education institutions and/or businesses in which mentors are paired with low-achieving students and meet with them each week to provide instructional and social and emotional support.

4) Develop a comprehensive program of after-school services that operates until 6:00 p.m. each weekday. As part of this plan, offer a voluntary, after-school Homework Center that offers instructional support to students in the completion of homework.

5) Develop and implement a summer enrichment program that enrolls both low- and high-achieving students and that combines enrichment instruction, computer-assisted instruction, outward bound experiences, advisor-advisee groups, and work experiences (for secondary school students). These types of summer programs have resulted in up to half-year gains in reading and mathematics achievement, and can offset the learning loss that accounts for up to 80% of the learning difference between advantaged and disadvantaged students.[61]

Chapter 3
Reducing Grade Retentions
Some Examples

Significantly reducing numbers of grade retentions is not easy; it requires substantial changes in how curriculum is shaped and how instruction is delivered to students. However, there are examples of schools and projects that have successfully undertaken such an initiative. Below are just a few of these examples.

Easthampton High School
Easthampton, MA

• In the Easthampton Public Schools, staff and administrators were concerned about the large numbers of students being retained in the middle school. In response, they decided not to retain low-achieving eighth grade students in the middle school, but to place them in an eighth grade homeroom within the high school. While students get additional personal and instructional support within the homeroom, they attend regular ninth grade academic classes. As students demonstrate their ability to handle ninth grade material, they are transitioned into regular ninth grade homerooms. The district has had a 93% success rate with this program.

Alex Velis, Guidance Counselor
Easthampton High School
70 Williston Avenue
Easthampton, MA 01027
(413) 527-3030

Center for Research on Elementary and Middle Schools
John Hopkins University
Baltimore, MD

• Robert Slavin, a researcher at John Hopkins University's Center for Research on Elementary and Middle Schools, has launched a program for students in prekindergarten through grade three. The goal of his program, Success For All, is to provide resources so that every student will reach the third grade on time with adequate basic skills. The elements of the program include: one-on-one tutors, using Chapter I funds; a cross-grade reading program that emphasizes cooperative learning, reading of trade books, and peer reading; assessments conducted on every student every eight weeks; a Family Support Team; and a school facilitator.

Dr. Robert Slavin
Center for Research on Elementary and Middle Schools
John Hopkins University
3505 N. Charles Street
Baltimore, MD 21218

RECAP
Boston Public Schools
Boston, MA

• In the Boston Public Schools, a RECAP Program exists in every middle school in which retained students in grades 6-8 are given the opportunity to be promoted to rejoin their age-appropriate grades. Participating students and their parents sign a contract with their respective school which, if contract conditions are met, allows the student to be promoted a grade at the end of the first semester and another grade at the end of the school year. Contract conditions include maintaining at least 85% attendance, passing all courses, completing 120 hours of community service or remediation each semester, and passing the Degrees of Reading Powers test. Students promoted at mid-year to the ninth grade are placed into a cluster program and receive additional instructional support.

Joe Smith, Executive Administrative Assistant
Boston Public Schools
26 Court Street
Boston, MA 02108
(617) 726-6200 Ext. 5690

Child Study Center
Yale University
New Haven, CT

• James Comer, a professor and director of Yale University's Child Study Center, has worked for the past twenty years with the elementary schools in New Haven to raise achievement levels of minority students. An underlying assumption in his work is that promoting psychological development in students will encourage bonding to school and result in increased achievement. His approach includes: the need for a strong understanding of child development theory; the formation of school governance and mental health teams; the creation of a school improvement plan; and multiple opportunities for parent involvement. This approach has resulted in dramatic gains in reading and math achievement in participating schools.

Dr. James Comer, Director
Child Study Center
Yale University
New Haven, CT
(203) 785-2548

Accelerated Schools Project
Stanford University
Stanford, CA

• Henry Levin, a Stanford University professor, has initiated a new Accelerated Schools Project with 40 schools nationwide to accelerate the learning pace for disadvantaged students. Rather than slowing down the pace of instruction and "dumbing down" the curriculum, Levin believes that the curriculum needs to focus on higher order thinking with a quickened instructional pace.

Consequently, all low-achieving students are placed in accelerated classes in project schools.

Henry Levin, Professor
SERAS Building
School of Education
Stanford University
Stanford, CA 943050-3084
(415) 723-0840

HOTS Program
Framingham, MA

• The Higher Order Thinking Skills (HOTS) program is designed to enhance students' ability to problem-solve through the use of computer-involved thinking activities. The curriculum involves student-teacher dialogues and work in computer labs, and is based upon raising cognitive skills through organizing information and linking new information to existing ideas. The program can be used with a school's existing curriculum and instructional materials. Evaluations have demonstrated significant gains on standardized tests in reading and math, and an increase in self-confidence and articulation ability.

Diana Nunnelly
Chapter I Computer Center
c/o Walsh Middle School
Brook Street
Framingham, MA 01701
(508) 788-0094

West Chester Area School District
West Chester, PA

• In the elementary schools of West Chester Area School District in Pennsylvania, school staff are organized into two clinical teams that include reading and remediation specialists, special education teachers, aides, student teachers, and all K-2 teachers. Each team is headed by a teacher-leader, who is trained in group decision making. The team approach allows for instruction to be provided to students at a ratio of one-to-ten or less for two or three hours each school day. A fall 1986 assessment revealed that all entering 2nd graders were at grade level, and test scores were higher in pilot schools than in control schools.

Dr. William Beighan, Superintendent
West Chester Area School District 829
Paoli Pike
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(215) 436-7100

Chapter 4
Statewide Data on Students Recommended for Grade Retention

Background

In response to the growing concern over the practice of grade retention, Massachusetts has become one of the first states to identify it as a critical issue by requesting reporting at the individual school level. The information presented here marks the first statewide compilation of grade retention data, and attempts to answer the question, "How many students did school personnel identify for grade retention at the end of the 1987-88 school year?"

Summary of Reuslts

Overall Results
In the Spring of 1988, 3.5 percent of the students in the Commonwealth were identified by school personnel as having failed to meet locally established standards for promotion.

Distribution of Results
The percentage of students recommended for grade retention varied widely by school district, ranging from zero to over 11 percent.

Results by Grade Level Grouping
The percentage of students recommended for grade retention in grades PK-3 and 9-12 was highest at 4.3 and 4.5 percent respectively, followed by 2.5 percent for students in grades 6-8 and 0.9 percent for grades 4-5.

Results by Gender
The percentage of males who were recommended for grade retention at 4.0 percent was higher than the percentage of females at 2.9 percent.

Results by Race/Ethnicity
A disproportionate number of students recommended for retention were racial/ethnic minorities. Although racial/ethnic minorities represented 16 percent of the total enrollment in 1987-88, they accounted for 35 percent of the total number of students recommended for retention. White students represented 84 percent of the total enrollment, but accounted for only 65 percent of the total number of students recommended for grade retention.

Results by Kind of Community
A disproportionate number of students recommended for retention attended schools in urban centers. Overall, 5.6 percent of the students attending schools in urban centers were recommended for retention. Percentages in other communities ranged from 2.8 percent in small rural towns to 1.3 percent in residential suburbs.

Statewide Results

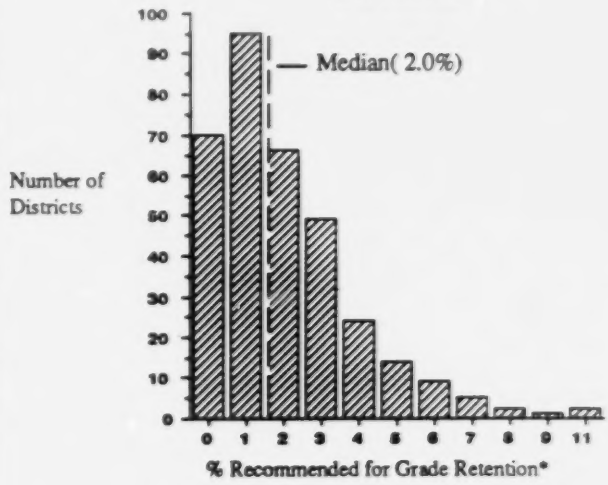
Overall Results

In the Fall 1987, 808,289 Massachusetts public school students were enrolled grades PK-12. Of that population, 28,233 were recommended for grade retention in June 1988. In other words, 3.5 percent of Massachusetts public school students failed to meet locally determined standards for promotion by the end of the 1987-88 school year. Table I provides a breakdown of state averages by grade, race/ethnicity, gender, and kind of community groupings. The results for each grouping are discussed in the next several sections of the report.

Distribution of District Results

Figure 1 illustrates that in most districts relatively low percentages of students were recommended for grade retention. The median percentage of students recommended for retention by school district was 2.0. In 33 districts, however, 5 percent or more of the students were recommended for grade retention, and in several districts 10 percent or more were recommended.

Figure 1
Distribution of % Recommended for Grade Retention
by School District
(342 Districts)



* 0=0-0.9%, 1=1-1.9%, etc.

Table I
Students Recommended for Grade Retention
for the 1988-89 School Year
Grades PK-12

	Number Recommended	Number Enrolled	Percent Recommended
Statewide (Grades PK-12)	28,233	808,289	3.5
Grade Level Grouping			
Grades PK-3	11,227	261,776	4.3
Grades 4-5	1,081	115,056	0.9
Grades 6-8	4,303	172,850	2.5
Grades 9-12	11,622	258,607	4.5
Race/Ethnicity			
Asian	838	21,543	3.9
Black	4,862	57,314	8.5
Hispanic	4,058	49,172	8.3
Native American	65	1,082	6.0
White	18,410	679,178	2.7
Gender			
Female	11,522	394,040	2.9
Male	16,711	414,249	4.0
Kind of Community*			
Urban Centers	18,477	331,537	5.6
Developed Suburbs	3,908	202,174	1.9
Growth Communities	2,207	96,311	2.3
Residential Suburbs	1,069	77,394	1.4
Rural Centers	1,907	73,206	2.6
Small Rural Communities	445	15,901	2.8
Resort/Retirement/Artistic	220	11,766	1.9

* A scheme which classifies Massachusetts cities and towns based on 15 community, social, demographic and economic attributes. See the back page of this report for specific classifications.

Results by Grade Level Grouping

The percentage of students recommended for grade retention varied significantly by grade level grouping. The highest number of retentions were recommended in grades 9-12 and PK-3 at 4.5 and 4.3 percent respectively. A smaller proportion of students in grades 6-8 were recommended for grade retention, while the lowest percentage of students recommended attended grades 4-5.

Table II shows the distribution of district data by grade level grouping. The 1st percentile indicates that one percent of the districts reported percentages equal to or below the results indicated, the 25th percentile indicates that 25 percent of the districts reported percentages equal to or below the corresponding grade level figures and so forth. For example, for grades 9-12, 75 percent of the districts recommended 3.7 percent or fewer students for grade retention.

It is interesting to note that within each grade grouping the median percent (50th percentile) reocmmended for retention by district was lower than the state average. This indicates that in half of the Commonwealth's school districts, relative to the state as a whole, proportionately fewer students were recommended for grade retention. The widest variation in district results occurred in grades 9-12, where the proportion of students recommended for grade retention ranged from zero to greater than 14.9 percent.

Table II
Recommended Grade Retentions
Distribution of District Data by Grade Grouping

	% Recommended for Grade Retention			
Percentile	Grades PK-3	Grades 4-5	Grades 6-8	Grades 9-12
1st	0.0	0.0	0.0	0.0
25th	1.3	0.0	0.0	0.0
50th	2.7	0.0	0.2	0.5
75th	4.4	0.7	1.3	3.7
99th	8.9	3.4	7.7	14.9
Average	4.3	0.9	2.5	4.5

Results by Race/Ethnicity

There were significantly large differences in the percentage of students recommended for grade retention among the various racial and ethnic groups within the state. Black and Hispanic students were recommended for grade retention most frequently (8.5 and 8.3 percent respectively), while Asian and White students were recommended least frequently (3.9 and 2.7 percent respectively). At 6.0 percent, a relatively high proportion of Native Americans were recommended for grade retention.

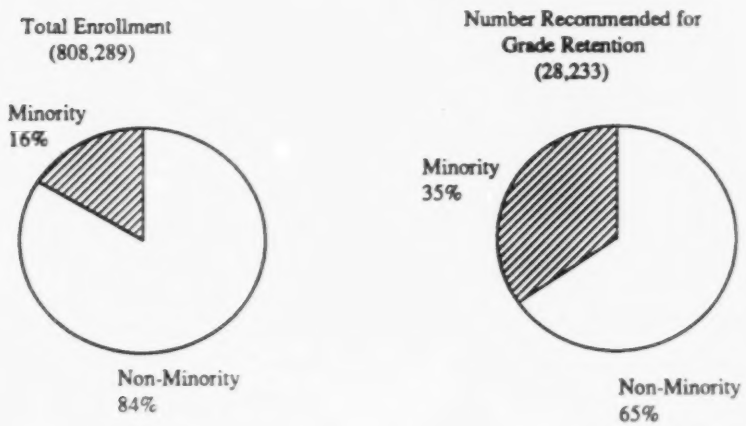
As shown in Table III, differences among racial/ethnic groups were relatively consistent across grade groupings. The percentages of Black and Hispanic students recommended for retention in grades 9-12 are especially noteworthy. At the high school level, more than one in ten Black and Hispanic students were recommended for grade retention.

Table III
Recommended Grade Retentions
by Race/Ethnic Groupings

	% Recommended for Grade Retention			
Race/Ethnicity	Grades PK-3	Grades 4-5	Grades 6-8	Grades 9-12
Black	8.0	2.1	8.0	12.5
Hispanic	8.6	2.8	6.9	12.4
Native American	6.8	2.1	3.1	8.5
Asian	4.6	1.4	1.5	5.8
White	3.5	0.7	1.7	3.4

Because racial/ethnic minorities were recommended for grade retention in higher percentages than non-minority students, they were overrepresented in the total number of students recommended. As shown in Figure 2, racial/ethnic minorities made up 16 percent of the total number of students enrolled in grades PK-12, but accounted for 35 percent of the students recommended for grade retention.

Figure 2
Minority Student Representation in
Total Enrollment and Number Recommended for Grade Retention



Results by Gender

Proportionately more males than females were recommended grade retention - 4.0 percent males as compared to 2.9 percent females. Table IV shows that the gender differences were consistent by grade level grouping. The table also indicates that proportionately more high school males were recommended for grade retention than males or females at any other grade levels.

Table IV
Recommended Grade Retentions
by Gender

	% Recommended for Grade Retention			
Gender	Grades PK-3	Grades 4-5	Grades 6-8	Grades 9-12
Male	4.8	1.2	3.1	5.1
Female	3.6	0.7	1.9	3.9

Results by Kind of Community

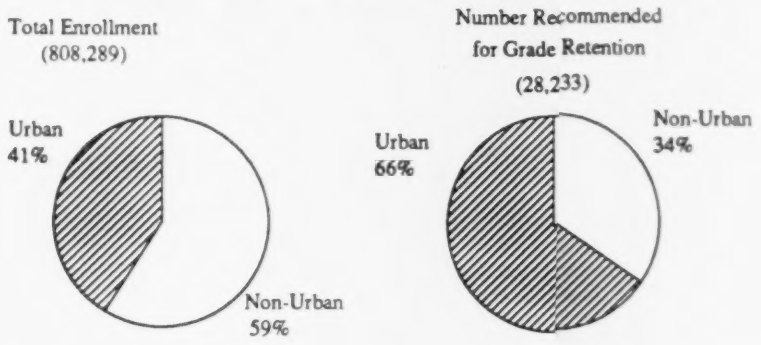
The percentage of students recommended for retention in grade was highest in the Commonwealth's urban school districts (5.6 percent). Students in small rural communities and rural centers were the next largest group recommended, while students in economically developed and residential suburbs were recommended the least. As shown in Table V, these differences remained fairly consistent across grade level groupings.

Table V
Percentages of Students Recommended for Retention in Grade
by Kind of Community and Grade Level

	% Recommended for Grade Retention			
KOC	Grades PK-3	Grades 4-5	Grades 6-8	Grades 9-12
Urban Centers	5.7	1.7	4.9	7.6
Small Rural	3.4	0.3	1.3	5.0
Rural Centers	3.4	0.8	1.4	3.5
Growth Communities	3.5	0.5	1.2	2.7
Econ.Developed Suburbs	3.1	0.3	0.7	2.3
Resort/Retiremet	3.4	0.6	0.5	1.7
Residential Suburbs	2.5	0.3	0.5	1.4

Urban students were greatly overrepresented in the total students recommended for retention in grade. As shown in Figure 3, urban students made up 41 percent of the total student enrollment, but accounted for 66 percent of the total number of students recommended for retention.

Figure 3
Urban Student Representation in the
Total Enrollment and Number of Recommended for Grade Retention



Conclusion

The figures provided here represent a first quantitative assessment of the extent to which grade retention occurs in the Commonwealth's public schools. Although data on the percentages of students who actually repeated a grade in 1988-89 are not provided, the reported data indicate the degree to which students failed to meet locally determined promotion standards at the end of the 1987-88 school year.

In summary, the information presented here documents that students were recommended for grade retention most frequently at the primary and high school levels, that minority students and males were overrepresented in the total number of students recommended, as were students attending schools in urban centers. The data also shows that while fewer than two students per hundred were recommended for grade retention in half of the state's school districts, in a number of districts, grade retention was recommended for as many as one in ten students, and in several districts, for over one in four high school students.

Future analyses of this nature will quantify the number of students who actually repeat a grade rather than the number of students recommended for grade retention.

Methodology

Source of Data

This report provides a first assessment of the extent of grade retention on a statewide basis. Data were derived from the *Chapter 188 Individual School Report (1987-88)*, a survey of Massachusetts public schools conducted by the Department of Education at the end of every school year. Although the Chapter 188 survey was first conducted for the 1986-1987 school year, 1987-1988 marked the first time that the Department requested information on the incidence of grade retention. Reported information included gender and racial/ethnic breakdowns for students grades PK- 12.

Definitions

The survey defined retention in grade in the following way:

> **Students who the school recommended <u>not</u> be promoted in June 1988.**

Stated another way, respondents answered the question, "How many students did school personnel identify as having failed to meet standards for promotion by the end of the 1987-88 school year?" Consequently, figures provided in this report do not answer the question, "How many students actually repeated a grade in the fall of 1988"? Data on actual grade repeaters were collected in the *Chapter 188 Individual School Report (1988-89)*, and will be documented in a subsequent report.

Percentages provided in this report were calculated by comparing the number of students recommended for retention in grade in June 1988 to the enrollment on October 1, 1987. Student enrollment data were derived from the *Individual School Enrollment Report (1987)*, prepared by the Department's Bureau of Data Collection and Processing.

Data Collection

Copies of the *Chapter 188 Individual School Report for 1987-88* were mailed to individual schools at the end of May 1988. School principals were asked to complete the report and forward it to their superintendent for review and verification. Reports were due in the Department July 30, 1988.

Response to the survey was high. Of the 1,768 public schools in Massachusetts surveyed, 1,744 (99 percent) reported. Statewide data represent all but one of the Commonwealth's 367 operating school districts, including cities and towns, regional academic

school districts, regional vocational-technical school districts, county agricultural schools and independent trade schools.

Verification of Data

The Department attempted to minimize reporting and processing errors in several ways. First, training sessions were held at each of the Department's regional education centers in June 1988, in conjunction with workshops on the *End of Year Pupil and Financial Report*.

Second, every survey was reviewed by Department staff for apparent reporting errors before the data were automated. This review process uncovered problems such as incomplete information and illegible or misplaced responses. Third, after the surveys were automated, several arithmetic and logical checks were conducted to detect keypunch errors and reporting errors which could not have been easily discovered during the pre-automation review.

Finally, school's responses were reviewed for face validity. Individual school and district results were compared to the results of demographically similar schools and districts to expose data that were relatively high or low. When the validity of a school or district's results were in question, local school staff were contacted and asked to verify, and when necessary, correct their original responses.

Limitations of Data

Due to the "pioneer" status of this study, the quality of the data provided here may be limited for some of the following reasons:

- **Schools may have reported <u>actual</u> grade retentions rather than students <u>recommended</u> for grade retention.**

Since some districts submitted their *Chapter 188 Individual School Report (1987-88)* as late as the Fall 1988, they may have inadvertently reported the number of students actually repeating a grade rather than the number of students who were recommended for retention the previous school year.

If recommended retentions were greater than actual retentions, this would have had the effect of lowering statewide and district data reported here. In fact, a sampling of urban school data from the 1988-89 Chapter 188 survey (in which schools indicated the number of students who were retained in grade during the 1988-89 school year) showed that 87 percent of those students recommended for grade retention in the Spring 1988 actually repeated a

grade in the Fall 1988. Since the sample was representative of urban areas and not representative of the state, additional analyses must be conducted before an accurate statewide comparison of recommended versus actual grade retentions can be made.

- **Reporting errors at the building level could limit the reliability of district level data.**

Although statewide data can tolerate minor reporting errors made at the building level, the reliability of district level results are extremely sensitive to school data. Since some schools may have only begun to develop procedures for maintaining accurate records on grade retentions, they may have provided incorrect information in the first reporting year. In the future, schools will be able to report more accurate data as they develop better record keeping and reporting systems.

- **Differences in local promotion policies may limit the comparability of district level data.**

Standards for promotion vary widely among and within school districts. Consequently, a student who may be recommended for grade retention in one site may be promoted in another. For example, in one district a standardized test may be used as a "promotional gate". In that district, students who fail the test may be recommended for retention in grade. However, comparable students in another district, where the test is not administered, may be promoted.

Even when promotion standards appear to be the same among districts, alternatives for students may result in different outcomes. For example, most high schools require students to accumulate a certain number of credits before they can be promoted. In some districts, however, conditional promotion policies allow students to advance with their class. Conditional promotions usually require students to attend summer school or to make up credits the following school year.

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Cooperative Learning

Cooperative learning is an instructional approach in which students in a classroom work together in small, heterogeneous groups. In cooperative learning, students are responsible for their groupmate's learning, as well as their own. Assessment of mastery is based on achievement of group goals in addition to individual mastery. Cooperative group learning has been found to increase achievement for low-achieving students.[62]

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Project-Based Learning

Project-based learning involves teaching students essential concepts and themes through completion of short- and long-term individual and group projects. Students are expected to conduct research, using a variety of sources (e.g., interviews, classroom resources, library research) and demonstrate mastery through presentations. These presentations include use of a variety of mediums (e.g., demonstration, written, oral, portfolio, visual).

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Peer Tutoring and Cross-Age Learning Opportunities

Peer tutoring involves pairing students together to learn and master material. Often, older students are paired with younger students, or students achieving at higher levels are paired with lower-achieving students. Peer tutoring can also include paired students helping each other, as in peer edits, paired study sessions, and peer corrections. Peer tutoring has been found to result in cognitive and affective gains for low-achieving tutors and the target students. In fact, cross-age tutoring has been found to yield 4 times the increase in achievement for each dollar of cost as lengthening the school day.[63]

Cross-age learning opportunities can be structured through multigrade classrooms, the elimination of grade structures, or time slots within each weekly schedule to bring students together across grades for peer tutoring and other activities.

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Applied Academics

Applied academics involves a set of instructional materials and learning strategies that relate academic knowledge and concepts to life and work experiences. Science, mathematics, and communication competencies are mastered by students using hands-on and visual learning methods in preference to the more traditional auditory (lecture) and paper/pencil approaches. Cooperative learning is an essential element of these active learning programs that have been implemented in comprehensive and vocational-technical high schools. Some applied academic materials are under development for elementary and middle school students.

Resource: Massachusetts Vocational Curriculum Resource Center
c/o Minuteman Regional Vocational Technical School
758 Marrett Road
Lexington, MA 01876
1-800-362-4371

Competency-Based Instruction

Competency-based instruction involves identifying key learning objectives, and basing instruction upon mastery of these objectives. Students' progression through school, then, is based less on letter grades and more upon demonstrations of competence of core concepts.

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Multiple Ability Instructional Strategies

Multiple ability instructional strategies means teaching to students' learning styles through employing a diversity of instructional approaches within the classroom. Teaching includes a variety of mediums (employing both left-brain and right-brain activities) that are geared to supporting students' learning strengths, while bolstering areas of weakness. Multiple-ability instructional strategies have been found to be especially important in building upon the learning strengths of low-ability readers.[64]

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